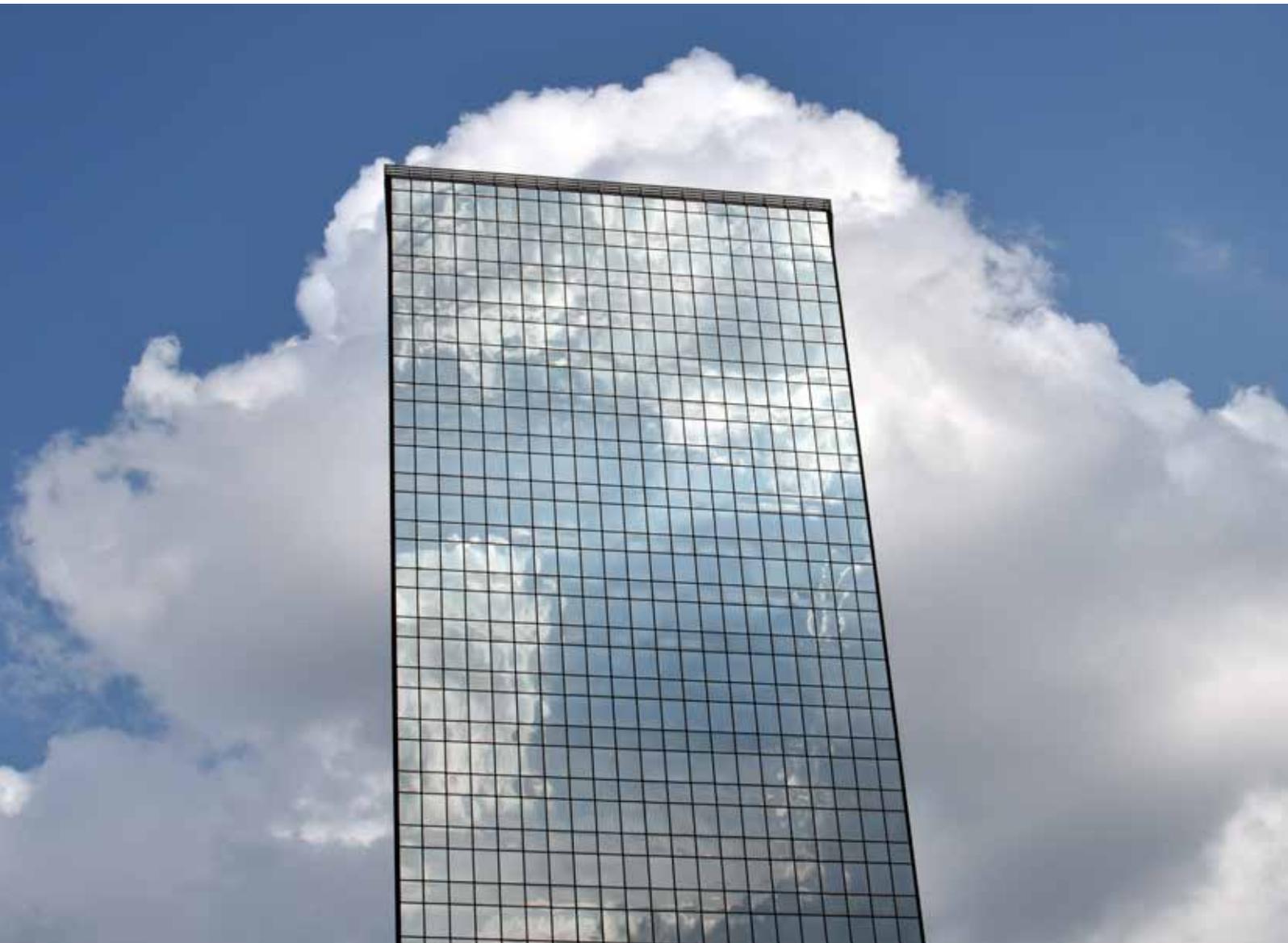


Pre-University summer catch-up courses  
*Academic Skills, Mathematics, Chemistry, Physics*

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# Headstart.



# Starting out at university?

## Good preparation is a major factor in successful study

Essential for all students are generic study skills, including researching, reading strategically, making notes and writing effective essays or lab reports.

Mathematics and/or statistics are vital subjects for students intending to major in engineering, all sciences including health science, psychology, forestry and commerce.

Physics and/or chemistry are key subjects for students majoring in the physical sciences, biochemistry and engineering.



## Headstart courses at UC



University of Canterbury staff are committed to student success. The best way to achieve this is to be prepared.

If you qualify for university entrance but lack a strong background in a particular subject, or if you have been away from study for some time, then think about our Headstart programme.

The Headstart programme offers you the chance to undertake study prior to the academic year that will boost your confidence and give you the knowledge and skills you need to succeed in your first year. The courses are timed to run just prior to the start of the academic year, so you can work or have a break all summer, then begin your Headstart course just before commencing at the University of Canterbury.

The Headstart programme runs alongside our other summer courses and the campus is alive with students involved in study, social, cultural and recreational activities. We have an attractive campus that is the perfect place for you to develop or grow your career.

Christchurch is a city which welcomes a wide range of students and it is close to some of New Zealand's most beautiful countryside.

I look forward to welcoming you to UC.

Catherine Moran,  
Assistant Vice-Chancellor (Academic)

*Whāia te iti kahurangi  
Ki te tūohu koe, me he maunga teitei  
Pursue excellence – should you stumble,  
let it be to a lofty mountain*

Headstart courses are four-week summer catch-up courses designed for newcomers to tertiary study who expect to qualify for entry to university but:

- lack a good grounding in a specific subject, or
- wish to gain confidence in the skills needed for study at tertiary level.

Courses run Monday to Friday, on campus, during mid January to mid February, before the start of the first university semester in February. If you wish, you can book accommodation at one of our halls of residence.

All Headstart courses are taught by well-qualified and supportive tutors. Practical work in the University's well-appointed laboratories features in the relevant courses.

These are intensive courses and extra work will be required outside class hours.

Early enrolment is advised. If you are waiting for NCEA results to come out, you can enrol in Headstart to ensure a place, then withdraw if you find you don't need it.

If you have more time, the Certificate in University Preparation (CUP) offers a more thorough grounding in these subjects. See [www.canterbury.ac.nz/get-started/transition/certificate/](http://www.canterbury.ac.nz/get-started/transition/certificate/)

## Subjects offered

This summer, courses will be offered in Academic Skills, Mathematics, Chemistry, and Physics. Details about course content are shown later in this brochure.

*Note: Headstart courses do not contribute credit points towards a degree.*

## Dates

Headstart courses run during the 2019/20 summer period, before the start of the first semester in February 2020.

## Classes

Classes are from 13 January to 9 February 2019.  
Monday – Thursday: 10.00 – 12.00am;  
1.00 – 3.00pm, Friday: 9.30am – 12.30pm

### BRDG006-20SU1

Academic Communication and Study Skills

### BRDG016-20SU1

Mathematics Part One

### BRDG023-20SU1

Chemistry

### BRDG024-20SU1

Physics



## Course fee

TBA

## Frequently Asked Questions

### What is covered in Headstart courses?

Headstart maths covers essential pre-university material generally equivalent to the key concepts in the subjects at NCEA level 2, or Cambridge AS level. Headstart chemistry and physics cover key concepts at NCEA level 2/3. Academic Skills covers skills that are important for all degree courses and essential for education, law, commerce, the humanities and the arts.

### Do I need Headstart?

If you have a strong, recent background in a subject at NCEA level 3 or equivalent, you don't need Headstart.

If you have good, recent results at NCEA level 2, contact us to discuss whether or not you need Headstart.

If you have NCEA level 1 in the relevant subject, or some credits at level 2, Headstart is right for you.

If you have no background in your chosen subject, you may find Headstart challenging. You may need to do some preliminary study before attending the course. Contact us to find out more.

### Where do Headstart Courses lead?

Headstart course	Prepares you for...	Which can then lead to....
<b>BRDG016-20SU1</b> Mathematics Part One	MATH101	EMTH118, EMTH119 and other 100-level maths courses
<b>BRDG023-20SU1</b> Chemistry	CHEM114 or (if you achieve a B grade) CHEM111	further study in chemistry or biochemistry if required
<b>BRDG024-20SU1</b> Physics	PHYS111 or (if you achieve a B+ grade) PHYS101	further physics and astronomy courses
<b>BRDG006-20SU1</b> Academic Communication and Study Skills	Useful for all subject areas	

### I don't have my NCEA results yet, so I don't know whether to enrol in Headstart or not.

If you are waiting for NCEA results to come out, you can enrol in Headstart to ensure a place, then withdraw if you find you don't need it.

Popular courses have limited entry, while any course with low enrolments might be cancelled, so we strongly advise early enrolment.

### Are Headstart courses a suitable preparation for study at other universities?

Headstart courses are designed to mesh with UC 100-level courses, so while they are highly likely to be helpful to students aiming for e.g. health sciences or veterinary science at other universities, we cannot guarantee that they will be entirely suitable preparation.

## Enrolling

Select one course only. You can enrol by calling the Contact Centre on +64 3 369 3999 or Freephone: 0800 VARSITY (0800 827 748 – within New Zealand only) Qualification: COP PREP

## Accommodation

Please visit the Headstart website for information on accommodation.

# Courses

All courses are very intensive. A student may enrol in only one course. There will be 4 hours of classes per day Monday to Thursday and 3 hours on Friday. Students must expect to put in extra work each day outside of class.

## Academic Skills

Academic Communication and Study Skills is for anyone who qualifies for university entry but wants to make sure they are ready for the transition to tertiary study; especially those aiming for the Arts, Humanities, Law or Commerce. It will be particularly useful to those who feel they lack a good background in essential communication and study skills, or have been away from study for some time.

Unless you have good, recent results in English or an English-rich subject at NCEA level 3, you should consider taking Academic Communication and Study Skills.

Contact our Liaison Team, [liaison@canterbury.ac.nz](mailto:liaison@canterbury.ac.nz) or call Freephone: 0800 VARSITY (0800 827 748) if you wish to discuss your needs.

You will learn transferable academic communication and study skills for successful university study, such as:

- Effective academic reading and writing
- Information gathering, academic conventions and assignment preparation
- Confidence and independent study habits

## Mathematics

This course provides essential background for students wishing to advance in Mathematics or who need Mathematics to support other subject areas, for example, Engineering, Physics, Commerce, Computer Science or Chemistry. Mathematics is also becoming increasingly important for students majoring in Biology.

You will gain confidence in the basic techniques of Mathematics and develop your skills in analysing and solving problems.

You will learn:

- algebraic manipulation and equations
- functions and their geometry
- calculus (differentiation and integration)



## Physics

The physics course provides valuable preparation for students wishing to advance in Physics, Engineering or other science-based courses that require a basic knowledge of physics. Students who achieve a B+ grade in the course will meet the pre-requisite for PHYS101. For others it is preparation for PHYS111. The course focuses mainly on mechanics and electromagnetism.

You will learn:

- Laboratory techniques and practical skills
- Classical mechanics: motion, momentum, forces, energy, motion
- Electromagnetism: electrostatics, circuits, capacitance, magnetism, inductance

## Chemistry

This course is for students who wish to advance in Chemistry, Biochemistry, Engineering or Forestry. It is also useful for students intending to study Biological Science or Geology. Students who achieve a B grade in the course will meet the pre-requisite for CHEM111. For others it is preparation for CHEM114.

You will learn:

- The nature of matter; chemical bonding
- Chemical reactions
- Simple volumetric analysis
- Energetics of chemical and physical processes
- Inorganic and organic chemistry

## More information

If you have any questions regarding your enrolment contact Joanna Leahy, phone (03) 369 3350.

For assistance with planning your course of study, contact the Programme Coordinator, [phyllis.mowe@canterbury.ac.nz](mailto:phyllis.mowe@canterbury.ac.nz)

To be sent a copy of the University of Canterbury Undergraduate prospectus 2020 please phone 0800 VARSITY (0800 827 748).

### Cancellation policy

The University of Canterbury reserves the right to cancel a course due to insufficient enrolments or other unforeseen circumstances. If a course is cancelled you will be advised as soon as possible and your fee returned in full.

### Refunds

The last date to withdraw with full fee refund is the first Friday after the official course start date.

### Waitangi Day observance

Waitangi Day is observed on 6<sup>th</sup> February so there will be no classes that day.